## **Summary**

This study examines the impact of agriculture-specific and economywide institutional reform in Russia and Ukraine on the productivity and efficiency of agricultural production. Production in the agricultural sector in Russia and Ukraine has fallen since reforms began in 1992. The decline is to a certain extent an inevitable result of reform as input and output prices realign to world prices. However, some of the decline is due to incomplete agriculture-specific and economywide institutional reform. The analysis shows that Russia and Ukraine have the potential to increase grain exports significantly if reforms are implemented.

Russia and Ukraine have undergone rapid economic and political changes since they became independent in 1992 and began to pursue economic reforms. In both countries, the economywide reforms have led to steep declines in per capita income, which has only recently started to rebound. Agricultural production and trade patterns also changed dramatically. Grain production fell by 46 percent from 1988-90 to 1998-2000, and similar declines were observed for other crops and livestock. From 1992 to 2000, net grain imports fell from 10 percent of world grain imports to less than half of 1 percent. In contrast, since reforms began, Russia has become a significant meat importer. In 2001, Russia's meat imports totaled 2.5 million metric tons (mt), about 19 percent of total world meat imports by volume. U.S. poultry meat exports to Russia were slightly over 1 million mt in 2001, accounting for about 79 percent of total Russian poultry imports and 33 percent of total U.S. poultry exports.

The transformation of the agricultural sector began with the general reform programs in 1992. Some of the proposed reforms were agriculture-specific, such as bankruptcy procedures for insolvent farms and land reform, but they were not implemented early on. The reforms that affected agriculture the most were economywide, such as price and trade reform, as well as institutional reforms such as privatization. The expectation was that output would contract initially as subsidies were eliminated, but eventually recover as farm managers increased their productivity, eventually leading to an increase in exports. The actual result of reforms to date has been a large drop in production, but no corresponding rise in output or productivity. This report shows that several measures of productivity and efficiency have declined since reform began.

This study argues that the productivity decline is due to incomplete reform. The price and trade reforms have been fully implemented, but agriculture-specific and economywide institutional reforms have been only partially implemented. Agriculture-specific reforms not yet fully implemented include:

- Bankrupting insolvent Russian and Ukrainian farms. Currently, farms can avoid bankruptcy simply by rolling over their debt. By removing the threat of bankruptcy, this practice eliminates an incentive for farmers to produce efficiently.
- **Liberalizing land transactions**. In prohibiting the use of land as collateral, current law severely limits farms' liquidity and the functioning of the agricultural credit market in general.

Economywide reform would involve:

- The creation of a system of commercial law that protects property rights. The threat of expropriation of profit reduces the incentive to engage in long-term investment and to care for durable assets. This problem is particularly acute in agriculture, where the failure to care for land or machinery has strongly negative long-term effects on productivity and profitability.
- More legislative stability. The system of commercial law as it exists now operates inefficiently primarily because legislation is constantly changing. Also, regional legislation often contradicts Federal legislation. Contradictory and frequently changing legislation makes it difficult for the court system to impose clear and consistent property rights definitions.

The main effect of completing these reforms would be to increase the flow of resources from unprofitable to profitable farms. Bankrupting insolvent farms would free up resources to be used elsewhere. The creation of a functioning credit market and other reforms that improve the investment climate would direct resources to low-cost producers, which will improve the overall competitiveness of the agricultural sector.

To illustrate the impact of hypothetical productivity increases if reforms were to be completed, some modeling projections are made for wheat and barley for the next decade using the USDA Baseline.

- Under the modestly optimistic **base** scenario, wheat and barley production in Russia and Ukraine reach 83 million mt in 2011, of which 10 million mt is exported.
- In the "Russia only" scenario, production increases to 93 million mt in 2011, and exports increase to 15 million mt.
- In the "moderate growth" scenario, production increases to 97 million mt in 2011, with exports of 21 million mt.
- In the high-growth "catch up" scenario (the least likely case), production rises to 114 million mt by 2011, of which 34 million mt are exported.
- In all three scenarios simulating production growth, exports probably would go to countries in the former Soviet Union, parts of the European Union, the Pacific Rim, and the Middle East.
- World wheat prices would decline from \$112/mt in 2011 in the base scenario to \$106/mt in the "moderate growth" scenario, and to \$99/mt in the "catch up" scenario.